

Docket No. F-6718

Ser. No. 09/728,240

**REMARKS**

Claims 7 and 21-31 remain in this application and are rejected. Claims 1-6 and 8-20 are previously cancelled. Claim 7 is amended herein address matters of form unrelated to substantive patentability issues.

The Examiner objects to the drawings under 37 C.F.R. § 1.83(a) for failing to show every feature of the invention specified in the claims. It is stated that the drawings do not show the car body. The Examiner's attention is directed to the specification at page 11, lines 6 and 7, wherein it is stated that the substrate 1 is the car body. Accordingly, withdrawal of the objection is respectfully requested.

Claims 7 and 21-31 are rejected as obvious over the J.C. Whitney (Whitney) reference in view of the Radiance reference and wither the Williams reference or the Hashizume reference under 35 U.S.C. §103(a). The applicant herein respectfully traverses this rejection. For a rejection under 35 U.S.C. §103(a) to be sustained, the differences between the features of the combined references and the present invention must be obvious to one skilled in the art.

The present claims are directed to a heat-shielding method and heat shield product which comprises forming a coating film containing aluminum on one side of a coated plate, which in a preferred application is a car body, and an upholstery

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disposed adjacent to the side on which said coating film has been disposed for radiant insulation purposes.

The Whitney reference discloses an after market aluminum foil sheet product for installation in automobiles. It is evident that this product is not a coating. Hence, the Whitney reference does not teach applying a coating having an aluminum pigment to an interior surface of a car body. The Examiner then relies on the Radiance reference for teaching a heat reflecting coating. However, this coating does not include aluminum pigment but instead uses a film containing zinc salt on an underside of attic and decking structures. In order to remedy this deficiency, the Examiner turns to the Williams and Hashizume references and asserts that the references teach that aluminum flakes and zinc flakes are alternatives in this art. The Examiner concludes that it would have been obvious to one of ordinary skill to apply the coating composition obtained by using aluminum pigment instead of zinc pigment in the Radiance invention as the radiant barrier in Whitney's document.

It is called to the Examiner's attention that in Radiance's coating composition, a zinc salt, such as zinc sulfate, is used and not a zinc pigment. Although it is asserted that the above-mentioned documents disclose that aluminum and zinc pigment, and other specific pigments are alternatives, it is clearly not disclosed that zinc salt and aluminum pigment are alternatives, or that zinc salt and

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zinc pigment are alternatives as infrared reflective substances. Accordingly, the combination of references does not teach to substitute aluminum pigments for zinc salt to one of ordinary skill in the art.

Furthermore, there is no description about the difference between the effects obtained by using these materials. It is important to use aluminum pigment not other infrared reflective pigments such as copper or nickel in the present invention. Examiner states that assertions in the amendment filed July 9, 2003, will not be accepted absent affidavit evidence. Accordingly, applicants submit herewith a declaration detailing tests made using the present invention having aluminum pigment, and tests made using zinc powder, zinc sulfate, and using no reflective barrier at all. It is respectfully submitted that the tests demonstrate the unexpected superior results of the present invention.

In the declaration, leafing aluminum pigment is blended in a heat-shielding coating composition in Experiment 1, non-leafing aluminum pigment in Experiment 2 and zinc powder in Experiment 3. And, because Radiance's product comprises a zinc salt, zinc sulfate is used in Experiment 4. As shown in declaration, aluminum pigments have high heat barrier effect superior to zinc powder and zinc sulfate. From this is it clear the effectiveness of the present invention is obtained by using aluminum pigment, not by using conventional infrared reflective pigments. Moreover, it is not disclosed that aluminum pigments have a greater heat

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barrier effect. Accordingly, it is not obvious to substitute aluminum pigments for zinc pigment to one of ordinary skill in the art.

Thus, it is respectfully submitted that the rejected claims are not obvious in view of the cited references for the reasons stated above. Reconsideration of the rejections of claims 7 and 21-31 and their allowance are respectfully requested.

With regard to the inventorship of the claims, the inventorship remains the same as that indicated in the initial filing of the application.

Applicant respectfully requests a two month extension of time for responding to the Office Action. Please charge the fee of \$420.00 for the extension of time to Deposit Account No. 10-1250.

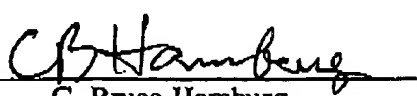
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In light of the foregoing, the application is now believed to be in proper form for allowance of all claims and notice to that effect is earnestly solicited. Please charge any deficiency or credit any overpayment to Deposit Account No. 10-1250.

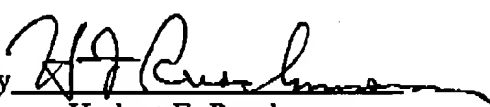
Respectfully submitted,  
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